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ABSTRACT

A study examined a contingency model involving the factors of task characteristics, structural characteristics, organizational relationships, and communication processes and their respective components in regard to their relationships to job performance and their ability to predict job performance. Data were gathered from approximately 190 members of 28 different task units within a state service-regulatory agency. Supervisors of each unit completed a questionnaire concerning task uncertainty, interdependence, standardization, formalization, autonomy, and centralization. Results indicated that the most important communication processes subcomponent correlating with performance was quality of information processed. The three organizational relationships of coworkers, supervisors, and upper middle management significantly correlated with the communication process variable of action taken on processed information. Interrelationships between organizational structure and task characteristics were found among the variables of interdependency, formalization, and standardization, while a negative correlation was found between information received and centralization. A post hoc regression analysis revealed that the factor of organizational relationships and one subcomponent of structural characteristics--autonomy--were the best predictors of job performance. (Author/FL)

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Task Characteristics, Structural Characteristics, Organizational Relationships, and Communication Processes: A Contingency Approach to Job Performance: Phase II

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Abstract

This paper examines a contingency model involving the factors of task characteristics, structural characteristics, organizational relationships, and communication processes and their respective components in regard to their relationships to job performance and their ability to predict job performance. The factor of organizational relationships correlates significantly with performance. Findings indicate that the most important subcomponent of communication processes correlating with performance is quality of information processed. The three organizational relationships of coworkers, supervisor, and upper management significantly correlate with the communication process variable of action taken on processed information. Interrelationships between organizational structure and task characteristics are found among the variables of interdependency, formalization, and standardization. A negative correlation results between information received and centralization. A post hoc multiple regression reveals that the factor of organizational relationships and the subcomponent of structural characteristics--autonomy--are the best predictors of performance.

Task Characteristics, Structural Characteristics, Organizational Relationships, and Communication Processes: A Contingency Approach to Job Performance

In the organizational environment, prolific research has focused on employee behavior in general and employee relationships in particular. Significant research areas have centered around such issues as motivation, job performance, job satisfaction, satisfaction with supervisor, overall satisfaction, feedback, task characteristics, and structural characteristics. From the organization's perspective, all of these are of concern, but the prime issues remain quality of employee job performance and the specific factors influencing this outcome.

In a comprehensive state-of-the-art paper, Jablin (1979) calls for a more situational, contingency approach to the general study of organizational communication and, in particular, to the study of the superior-subordinate dyad. In response, researchers such as Bedeian, Mossholder, and Armenakis (1983); Caldwell and O'Reilly (1982); Falcione, McCroskey, and Daly (1977); Frost (1983); Griffin (1982); and Zahn and Wolf (1981) take such a direction, but concern in general has been associated with the influence of situational variables on satisfaction rather than employee job performance. We argue a similar approach to performance.

Although numerous studies have investigated factors affecting job performance (Ilgen & Knowlton, 1980; Ilgen, Mitchell, & Fredrickson, 1981; Matsui, Okada, & Inshita, 1983; Pulakos & Wexley, 1983), there is a general lack of effort in developing a more comprehensive, multidimensional contingency model. From our perspective, the possible interrelationship of four factors in particular stands our as most meaningful in influencing employee performance: (1) task characteristics, (2) structural characteristics, (3) organizational relationships, and (4) communication processes. This study, therefore, attempts to investigate the relationship of these four factors and their respective subcomponents as they relate to each other and to employee performance. Finally, their potential for predicting performance is also examined.

TASK CHARACTERISTICS

The nature of a task may be described in many ways. However, two variables have been cited as major characteristics: undertainty and interdependence. Task uncertainty reflects the extent to which the task is unpredictable or has a high degree of change. Research in this respect clearly reveals three dimensions: variability, complexity, and evaluation specificity (Galbraith, 1973; Hall, 1962; Perrow, 1967; Pugh, Hickson, & Hinings, 1969; Van de Ven & Delbecq, 1974). Clearly related to uncertainty is the notion of task interdependence, which reflects the extent to which the task involves input from multiple persons or areas. Two dimensions of task interdependence have been suggested by previous research: the number of elements or activities required for task completion and the degree of flexibility in the combination of activities or elements (Steiner, 1972).

STRUCTURAL CHARACTERISTICS

Structural characteristics may be viewed from the perspective of how formalized, standardized, and centralized the organization is. Implicit in these structural characteristics is the notion of autonomy. The classic Aston studies, originating in the research of Pugh, Hickson, Hinings, MacDonald, Turner, and Lupton (1963), suggest that these highly related variables are the most critical ones. Formalization refers to the extent to which rules and/or regulations are written. Standardization reflects the extent to which activities are standardized or legitimized by the organization. Centralization and autonomy are closely related and reflect, respectively, the degree to which decisions are made at the top of the hierarchy and the degree to which decision making within areas can be done independently.

ORGANIZATIONAL RELATIONSHIPS

Ample research indicates the significance of organizational relationships on employee satisfaction and performance (Baird & Diebolt, 1976; Bass, Valenzi, Farrow, & Solomon, 1975; Brown, 1964; Dansereau, Cashman, & Graen, 1973; Dubin, 1965; Fleishman & Harris, 1962; Jablin, 1979; Level & Johnson, 1978; Schriesheim & Murphy, 1976; Weed, Mitchell, & Moffitt, 1976). Our concern with organizational relationships focuses upon differing hierarchial levels as they might interface with task characteristics, structural characteristics, and communication processes. For purposes of this study, we limit our concern to the employee's relationships with coworkers, immediate supervisor, and upper management.

COMMUNICATION PROCESSES

Communication processes may be viewed in a variety of ways, but in this study we are primarily concerned with more of an information-processing approach (much like the information-processing model offered by Penley, 1982). As such, communication process dimensions include information sent (Sent) and received (Received), action taken on information processed (Action), sources of information (Source), and quality of information (Quality). Implicit in these dimensions are concerns of information flow, the communication networks in which this flow occurs (relating to structure) the decisions for such transmissions (relating to autonomy) and the persons responsible (relating to relationships).

Previous research has, to some extent, investigated these four factiers, i.e., task, structure, organizational relationships, and communication processes, and, in varying degrees, certain of their subcomponents in terms of their influence on job performance. Also, previous research has suggested some relationships between these factors and subcomponents.

Kapp and Barnett (1982), for instance, have recently investigated the variables or organizational autonomy and environmental uncertainty as factors influencing boundary communication. Jablin (1982) finds that certain structural characteristics influence subordinates' perceptions of supervisory

openness. Tushman (1978) looks at variations in work characteristics and observes that, as task uncertainty and complexity increase, a need for more information processing arises. Galbraith (1974) notes that "the greater the task uncertainty the greater the amount of information that must be processed during task execution in order to achieve a given level of performance" (p. 28). Herbert (1981) concurs with Galbraith, concluding that "as uncertainty increases, demands on organization information processing increase" (p. 125). Fark and Scott (1983) in investigating the structural characteristic of autonomy claim that "variation in autonomy produced a negative effect on quantity of performance and no effect on quality of performance, though subjects in the more autonomous conditions reported a higher level of autonomy" (p. 203). Griffin (1982), on the other hand, finds that "task variety, autonomy, and feedback are positively and significantly correlated with productivity" (p. 933).

In looking at employee perception of job characteristics as they might relate to organizational constraints, Walsh, Taber, and Beehr (1980) comment that "the effects of job characteristics on individual outcomes such as job satisfaction may be contingent upon the organizational setting" (p. 252). Incorporating the dimension of satisfaction, Bhogot (1982) indicates that "in situations in which the individual's performance-related behaviors are relatively unrestricted by behavorial demands on the immediate work situation, changes in job performance are strongly and positively related to changes in job satisfaction" (p. 783).

It would seem, therefore, that certain communication processes (e.g., source of information), as they occur between different organizational relationships (e.g., coworker), according to different structural characteristics (e.g., formalization), regarding different task characteristics (e.g., uncertainty), might very well have some significant interactions among themselves as well as significant influence on an employee's job performance.

Lacking, however, is a comprehensive attempt to investigate these variables in a multidimensional contingency model with respect to their relationships to each other, to job performance, and to their potential as predictors of job performance.

Based upon the above rationale, the following research questions are advanced:

Research Question 1: Is there a relationship between employee job performance and the contingency factors of task characteristics, structural characteristics, organizational relationships, and communication processes?

Research Question 2: Is there a relationship between the subcomponents of the contingency factors and employee job performance?

Research Question 3: Is there a relationship between the subcomponents of task characteristics, structural characteristics, organizational relationships, and communication processes?

Research Question 4: Are the contingency factors of task characteristics, structural characteristics, organizational relationships, and communication processes, or their subcomponents, significant predictors of employee job performance?

PROCEDURES

Sample

The population pool came from 28 task units of a state service-regulatory agency whose authority is dictated by the Legislature. This agency of approximately 214 employees performs a number of different functions including both interrelated tasks and independent tasks. The work force includes management, technical, clerical, and nonmanagement professional personnel with the majority located at the central agency headquarters and approximately 60 members distributed throughout the state.

The agency director and division heads were asked to define task units within their suborganizations for inclusion in the research. A task unit was defined as a group of people working interdependently to accomplish a major task or product which is a substantial portion of the group's daily responsibilities. Approximately 12 major divisions within this task agency yielded 28 task units and involved approximately 189 participants.

The task-unit level data were collected from the supervisors of each task unit. Supervisors completed a questionnaire covering the following task-unit variables: task uncertainty, task interdependence, standardization, formalization, autonomy, and centralization. The specific items are described in the following section. Where more than one task unit was under the supervision of a single supervisor, the supervisor was asked to indicate any differences between the units; no differences were noted, however.

Implementation of Task Characteristics

Task Uncertainty. The questionnaire items tapping task uncertainty were constructed from the Aston scales (Pugh, Hickson, Hinings, MacDonald, Turner, & Lupton, 1963; Pugh et al., 1969) around the three dimensions of task uncertainty noted in the previous review of literature: (1) variability, (2) complexity, and (3) number of elements or activities in the search process. Three of the scales reflect the three dimensions of task uncertainty: specificity of criteria of quality evaluation, multiplicity of outputs, and customer orientation. These scales were incorporated into the survey questionnaire of task uncertainty. The point-value ranges (1-4) were altered to make the items suitable for use with 7-point scale items.

To collect data on all three dimensions of task uncertainty it was necessary to supplement the Aston scales with the following items presented on a 7-point scale: the number of activities involved in the accomplishment of the task;

the number of exceptions encountered in the task; the level of complexity of the task; and the extent to which the nature of the task or task activities change.

Task Interdependence. Task interdependence was measured through the use of a 6-item scale reflecting the following dimensions of task interdependence: (1) number of elements or activities, and (2) amount of flexibility in element or activity combination.

Task uncertainty and task interdependence scores were added to achieve an overall score for each task unit. This task characteristic was reflective of high uncertainty and interdependence.

Implementation of Structural Variables

Standardization, formalization, autonomy, and centralization were also measured at the task-unit level through a questionnaire given to supervisors. At this point, however, several problems arose with the use of the Aston measures (Pugh et al., 1963; 1969) of these structural variables. First, the Aston scales are designed to tap the structural characteristic of organizations and are, accordingly, global in nature. Second, the task units in the current study are members of a large state agency and have, at a minimum, identical state rules and regulations providing similar standardization and formalization. For these reasons, it is imperative that the structural measure be sensitive to task unit rather than agency-level data with respect to these variables. Finally, the language employed by the Aston items was judged to be unfamiliar to the population used for this research. For these reasons, a modification of the Aston scales was developed into a survey questionnaire. The specific implementation of each structural variable is described here.

Standardization. Standardization was measured through the use of an 11-item, 7-point scale, which measured the extent to which rules and procedures

existed for various activities. The measure of standardization reflected the extent to which activities were legitimized by the organization, rather than left to the discretion of the employee.

Formalization. Formalization was measured through the use of a 5-item, 7-point scale. Formalization reflected the extent to which rules and regulations were written.

Autonomy. The questionnaire used an adapted Aston autonomy measure. Autonomy was measured at the task-unit level by asking supervisors to indicate the decisions they could make, even if others subsequently confirmed the decision.

Centralization. Centralization information was collected from three levels of organization--department, division, and task unit. Supervisors indicated the extent to which the unit was centralized or to whether decisions were made at the top.

Implementation of Communication Processes and Relationships

The ICA survey questionnaire was used to collect data with respect to communication processes and organizational relationships. This information was collected at the employee and supervisory levels. Supervisors were not considered as a part of the work group they supervised, but as members of the group in which they worked.

Communication processes, a composite variable, included the following dimensions: information received, information sent, quality of information, amount of action taken from information sent, and amount of information from various sources.

Organizational relationships were measured at three levels: with coworker, with supervisor, and with upper management. The overall relationship variable also included a component which reflected the level of participation that employees felt they had in the work place.

Implementation of Performance

Employee-level performance was measured through the use of performance evaluations and was aggregated to reflect the performance of the work group. As such, this variable was unobtrusively collected from personnel records. The following dimensions of performance were included: productivity, work habits, attitude, dependability, initiative, use of time, accuracy, ability to take instructions, job knowledge, communication, interest in work, observing rules and regulations, interest in additional training, and cooperation. Each of the items was measured on a 10-point rating scale.

Analysis

Data with respect to the first three research questions were analyzed by a Pearson Product Moment correlation; the alpha level was a priori set at .05. Data with respect to research question 4 were analyzed through a Multiple Regression; the alpha level was set at .05.

RESULTS

Research Question 1: Is there a relationship between employee job performance and the contingency factors of task characteristics, structural characteristics, organizational relationships, and communication processes?

Among these four contingency factors, the results indicate that one--organizational relationships--clearly emerged as significantly correlating with employee job performance ($r=.52$, $p<.05$)(see Table 1). In particular, the subcomponent of supervisor ($r=.39$, $p<.05$) and upper management ($r=.31$, $p<.05$) most strongly influenced this overall contingency outcome. Although somewhat directional, the subcomponent of coworker ($r=.21$, $p>.05$) was not significant (see Table 2).

(Place Table 1 about here)

Research Question 2: Is there a relationship between the subcomponents

of the contingency factors and employee job performance?

With respect to task characteristics, neither uncertainty ($r=.06$, $p>.05$) nor interdependence ($r=.23$, $p>.05$) significantly related to job performance (see Table 2). In the case of structural characteristics, autonomy proved to be significantly correlated to performance ($r=.38$, $p<.05$). The remaining three subcomponents, formalization ($r=.03$, $p>.05$), standardization ($r=-.20$, $p>.05$), and centralization ($r=.01$, $p>.05$) did not. As previously indicated, two of the three subcomponents or organizational relationships were found to relate significantly to performance--supervisor ($r=.39$, $p<.05$) and upper management ($r=.31$, $p<.05$)--and, while not significant, the subcomponent of coworker was directional ($r=.21$, $p>.05$). With respect to communication processes, quality of information processed significantly correlated with performance ($r=.33$, $p<.05$) and action taken on processed information came very close to achieving significance ($r=.30$, $p>.05$); the remaining subcomponents of information received ($r=-.23$, $p>.05$), information sent ($r=.25$, $p>.05$), and source of information ($r=.08$, $p>.05$) were not significantly correlated with job performance.

(Place Table 2 about here)

Research Question 3: Is there a relationship between the subcomponents of task characteristics, structural characteristics, organizational relationships, and communication processes?

The results of this analysis produce a somewhat complex array of relationships. The subcomponent of uncertainty for task characteristics significantly correlated with the subcomponents of standardization ($r=-.60$, $p<.05$) and formalization ($r=-.63$, $p<.05$) for structural characteristics (see Table 3). The task subcomponent of interdependence also significantly correlated with the structural characteristics' subcomponents of standardization ($r=.34$, $p<.05$) and formalization ($r=.38$, $p<.05$). The structural

characteristics' subcomponent of formalization also significantly correlated with the organizational relationship subcomponent of coworker ($r=.35$, $p < .05$). The structural characteristics' subcomponent of autonomy correlated with the task variable of interdependence ($r=.44$, $p<.05$) and the communication process variable of information received ($r=-.35$, $p<.05$). The structural component variable of centralization also significantly correlated with information received ($r=-.44$, $p<.05$). The organizational relationship variable of coworker, supervisor, and upper management (see Table 4) all significantly correlated with the communication processes' variables of information sent ($r=.39$, $p<.05$; $r=.36$, $p<.05$; and $r=.60$, $p<.05$) and action taken on information ($r=.45$, $p<.05$; $r=.47$, $p<.05$; and $r=.55$, $p<.05$). In addition, the relationship variables of coworkers and upper management also correlated with the communication process variables of source and quality of information ($r=.54$, $p<.05$; $r=.35$, $p<.05$; $r=.34$, $p<.05$; $r=.41$, $p<.05$).

(Place Tables 3 and 4 about here)

Research Question 4: Are the contingency factors of task characteristics, structural characteristics, organizational relationships, and communication processes, or their subcomponents, significant predictors of employee job performance?

To answer this, the four major factors--task characteristics, structural characteristics, organizational relationships, and communication processes--were cast into a regression model for the prediction of job performance. Because the contingency factors of task characteristics and structure were not found to be correlated with performance, subcomponents of these factors were used in the multiple regression model together with the factors of organizational relationships and communication processes. Accordingly, the following predictors were cast into the model: uncertainty, interdependence, standardization, formalization, centralization, autonomy, organizational relationships;

and communication processes.

Owing to the problems associated with the use of multiple predictors in situations with a small number of cases, only the first two significant predictors were examined. As expected from the analysis of the previous research questions, organizational relationship was the most significant predictor of task-unit performance ($r=.52$, $p < .05$)(see Table 5). Autonomy was the second significant predictor of performance (multiple $r=.62$, $p<.05$). After organizational relationships, the structural variable of autonomy contributed more to the prediction of performance than either task characteristics, communication processes, or other structural variables.

(Place Table 5 about here)

DISCUSSION

Research Question 1: Is there a relationship between employee job performance and the contingency factors of task characteristics, structural characteristics, organizational relationships, and communication processes?

The findings of this study relative to the influence of organizational relationships on job performance support the findings of previous research. In particular, the information exchange between supervisor and subordinate is of paramount significance.

The influence of upper management in this study is somewhat more difficult to explain. Much of this may result from the nature of this state organizational hierarchy. In the state agency used in this research, the director of the department was appointed by and reported directly to the Governor. Nevertheless, hiring, staffing, and other personnel decisions were heavily influenced by the state personnel department. Because of this, upper management authority was more relevant for some organizational decisions than others and was not substantially different from supervisor authority for the same. Clearly there were some issues for which upper management was relatively powerless.

A second feature of interest is the difference in hierarchial level among supervisors reporting directly to the director of the department. These levels vary from the deputy director to the administrative assistant. Accordingly, the task units studied in this research vary considerably with respect to function and position in the departmental hierarchy.

Relationship with coworker, although correlating positively with performance, is not statistically significant. Given that the structural characteristic of formalization is the only significant correlation with coworker could again suggest something about the uniqueness of this organizational hierarchy.

Another explanation for this finding may be the relationship between interdependence and the importance of coworker relationship on performance. Interdependence was positively (r=.23) although not significantly correlated with performance (see Table 2). A similar relationship was found between coworker and task interdependence (r=.21). These relationships may be indicative of the situations in which coworker relationships have an impact upon importance, i.e., when the nature of the task is interdependent, coworker relationships are more important than when the situation requires less dependence upon others. This interpretation is not tested by the analysis, but seems reasonable, particularly in light of the failure to find any similar relationship between supervisor or upper management relationship and interdependence (see Table 3). Future research should determine the strength of the relationship between interdependence and the relative importance of coworker relationships on job performance. As a post hoc analysis, the interrelationships between the four contingency factors are also examined.

The analysis reveals two significant correlations between the contingency factors (see Table 6). Organizational relationships correlated significantly with communication processes ($r=.74, <p .05$), and structural characteristics correlated significantly, but negatively, with task characteristics

($r=-.64$, $p<.05$)

(Place Table 6 about here)

The significant correlation between organizational relationship and communication processes is not surprising, considering the very basis of such relationships involves the sending and receiving of information concerning job requirements, job performance, management practices and policy, and so on. This correlation probably also reflects the positive (but nonsignificant) relationship between communication processes and performance.

The negative correlation between task characteristics and structural characteristics results no doubt from the mixed influence of the task variables, uncertainty, and interdependence.

Research Question 2: Is there a relationship between the subcomponents of the contingency factors and employee job performance?

As previously discussed, the organizational relationships subcomponent of supervisor and upper management significantly correlates with employee performance. The only other factor subcomponent to correlate significantly is autonomy. This finding adds more confusion to the results of the Fark and Scott (1983) and Griffin (1982) studies regarding autonomy and job performance. The notion of autonomy may be a task-unit level perception, and, in general, may be somewhat unique to a specific organizational hierarchy.

In this study, autonomy was measured at the task-unit level by asking supervisors to indicate the decisions they could make even though others subsequently had to confirm the decision. As the supervisor's perception of autonomy was not related to any employee perception, it may not have been an accurate perception of task-unit autonomy.

In the Fark and Scott study, employees reported a higher level of autonomy, i.e., the employee perception coincided with the measure of autonomy

used by the researchers. In this case, although supervisors perceive their own autonomy as high, they may or may not have passed that decision-making freedom to their subordinates. Regardless, subordinates may or may not have perceived this phenomenon accurately. Future research should continue to explore the impact of autonomy and the perception of this factor at both the task-unit level and supervisor level.

Another clear finding of this research is the relationship between structural elements and task characteristics. The influence of task uncertainty and interdependence clearly are as suggested by previous research. It appears that the use of structural mechanisms such as standardization is positively correlated with interdependence and negatively with uncertainty. Under uncertain conditions, it would be difficult to use structural mechanisms for organizational control. In contrast, highly interdependent task units would find structural mechanisms useful for low-level organizational control.

Interaction effects are not possible to determine with the analytical methods used in this research. Future research should examine the interaction between uncertainty and interdependence and should allow more precise explanations of the role of structural mechanisms and communication processes in promoting employee job performance.

Research Question 3: Is there a relationship between the subcomponents of task characteristics, structural characteristics, organizational relationships, and communication processes?

The post hoc analysis offers a reasonable explanation for the negative correlation between task characteristics and structural characteristics. The highly significant negative correlation between the task subcomponent of uncertainty and the structural subcomponents of formalization and standardization no doubt is reflecting that as organizations become more standardized and formalized the level of uncertainty in the tasks performed by employees

decreases. At the same time, the much lower but still significant positive correlations between the task subcomponent of interdependence and the structural subcomponents of standardization and formalization indicate that formalizing and standardizing task activities also lead to greater task interdependence. The relatively strong and positive association between the task characteristics of interdependence and the structural characteristic of autonomy is difficult to interpret. One would expect to find that the more interdependent the task the less the work unit autonomy.

Again, this finding may be related to the manner in which autonomy is assessed. Clearly, the supervisor's feedom to make decisions is not necessarily related to the employee's perception of autonomy; this issue was discussed previously.

It is also possible that supervisors of highly interdependent task units may have been given more autonomy, due to their capacity to rely on structural control and/or their position within the hierarchy. Again, in this state department, supervisors at higher organizational levels may have perceived more autonomy. The correlation between centralization and autonomy seems to support this interpretation.

Given previous research concerning information exchange (i.e., amount, nature, and mode) between and among certain organizational relationships, i.e., Baird and Diebolt (1976), Lawler, Porter, and Tenenbaum (1968), Penfield (1974), Read (1962), Redding (1972), it is certainly no surprise to find the positive and highly significant correlations between the factors of organizational relationship and communication processes. The influence of upper management continued to prevail as it had a significant positive correlation with every communication subcomponent except information received. Overall, it appears that employees with good upper management relationships tend to be more satisfied with their interaction, with the exception of information received.

Although this study does not examine the specific scale items of this subcomponent, future research should investigate this with respect to the issues in which information received is unrelated to the quality of the person's relationship with upper management.

As the post hoc analysis clearly reveals, the relationship with coworker assumes more importance with respect to communication processes that it does with performance. As in the case of upper management, coworker correlates positively with every subcomponent of communication processes except information received. Interestingly, the supervisor relationship and communication processes in general show much less relationship than with performance. Two subcomponents of communication processes do significantly correlate with supervisor relationship: information sent and action taken on information sent. Employees with good supervisor relationships feel that they are sending sufficient information and that appropriate action is being taken on it. On the other hand, the amount of information employees receive and such aspects as its timeliness, excessiveness, accuracy and usefulness are unrelated to the quality of relationship with the supervisor.

In terms of job performance, then, it appears that the relationship dimension of the supervisor-subordinate dyad, in this case, is more important to job performance than is the overall communication process involved in supervisor-subordinate interaction. For this particular agency, future research should also focus more specifically on the message content of supervisor-subordinate interactions. This would help to establish clearer links between employees' relationships with upper management and supervisors and the communication issues most related to the quality of these relationships. The data indicate that, to some extent, relationships with supervisors in particular are unaffected by the quality of information received from various sources. Individual item analysis would be most helpful to understand the specific issues for which the employee may hold his/her supervisor accountable, i.e., those issues in which communication would be related to supervisor relationship.

Research Question 4: Are the contingency factors of task characteristics, structural characteristics, organizational relationships, and communication processes, or their subcomponents, significant predictors of job performance?

The analysis of this question clearly shows that organizational relationships are the most significant factor in the prediction of job performance at the task-unit level. This prediction is improved through consideration of the autonomy of the work group: the more autonomous the task unit and the more positive the relationships within that task unit, the higher the work-group performance.

These findings encourage an examination of the specific relationships which make a difference in work-group performance. Accordingly, the overall relationship factor is broken down between coworkers, supervisor, and upper management (this procedure also results in a fourth variable, which appears to reflect overall participation in the unit). Results of a post hoc multiple regression reveal that among the components of overall organizational relationship, relationship with supervisor is the most significant predictor of task unit performance ($r=.39$, $p<.05$). Autonomy continues to emerge as the second most significant predictor. Although interesting, it is important to note that overall relationship is a better predictor of job performance than the specific relationship, i.e., supervisor.

SUMMARY

Overall findings suggest the following conclusions. Job performance correlates significantly with organizational relationship and in particular with the subcomponents of immediate supervisor and upper management. Organizational relationship and communication processes also significantly correlate, probably due to the positive (but not statistically significant) influence of communication processes on performance. Task characteristics of uncertainty

and interdependence and structural characteristics of formalization, standardization, and centralization (with the exception of autonomy) appear to have relatively little effect on the outcome of performance. With respect to communication processes, quality of communication correlates significantly with organizational relationships, but most closely associates with coworker and upper management.

Action taken on information exchange is significantly related to all three organizational relationships. The interface between organizational characteristics and task characteristics is reflected in the positive relationship between task interdependency, formalization, and standardization. Organizational formalization and coworker relationship indicates a greater need of task interdependency, thus, perhaps, providing a link among task characteristics, organizational characteristics, and organization relationships. Also, as organizations become more standardized and formalized, task uncertainty tends to decrease. Finally, overall organization relationships are a predictor of job performance with supervisor relationship being perhaps the most important indicator. The other significant predictor of performance appears to be task-unit autonomy.

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Table 1

Correlations between Job Performance and

Task Characteristics, Structural Characteristics,

Organizational Relationships, and Communication Processes

	Performance
Task	.19
Structure	.04
Organization	.52*
Communication	.20

N=28

*p<.05

Table 2

Correlations between Job Performance and Components of Task Characteristics, Structural Characteristics, Organizational Relationships, and Communication Processes

Contingency Variables	Performance
Task	
Uncertainty	.06
Interdependence	.23
Structure	
Formalization	.03
Standardization	-.20
Centralization	.01
Autonomy	.38*
Communication Processes	
Quality	.33*
Action	.30
Received	-.23
Sent	.25
Source	.08
Organizational Relationships	
Coworker	.21
Supervisor	.39*
Upper management	.31*

N=28

*p<.05

Table 3

Correlations between Task, Structure,

Organization, and Communication Variables

	Task		Structure			
	UNCER	INTER	STAND	FORMAL	AUTON	CENTR
TASK	.31*	-.55*	-.61*	.65*	-.06	-.24
INTER	-.11	1.00	.34*	.38*	.44*	.21
STRUC	-.39*	.55*	.81*	.69*	.42*	.56*
STAND	-.60*	.34*	1.00	.72*	-.14	.23
FORMAL	-.63*	.38*	.72*	1.00	-.04	.00
AUTON	.17	.44*	-.14	-.04	1.00	.37*
CENTR	.26	.22	.23	.00	.37	1.00
RELAT	-.12	.13	.04	.07	.08	-.02
COWORK	-.26	.21	.28	.35*	.07	-.30
SUPER	-.16	-.14	-.22	-.10	.02	-.27
UPPMGMT	-.12	.07	.11	.07	-.05	.09
COMM	-.03	.04	.09	.17	-.06	-.15
RECEIVED	.19	-.28	-.25	-.25	-.35	-.44
SENT	-.28	.15	.04	.26	.00	-.11
QUALITY	-.07	.15	.27	.23	.11	.11
ACTION	.01	.09	.16	.17	.12	.11
SOURCE	-.07	.11	.08	.30	.05	-.05

N=28

*$p < .05$

Table 4

Correlations between Subcomponents of

Organizational Relationships and Communication Processes

Organization Relationships	RECEIVED	SENT	ACTION	SOURCE	QUALITY
Coworker	.17	.39*	.45*	.54*	.35*
Supervisor	.06	.36*	.47*	.12	.21
Upper Management	.10	.60*	.55*	.34*	.41*

N=28

*p< .05

Table 5

Task Characteristics, Structural Characteristics,

Organizational Relationships, and Communication Processes

As Predictors of Job Performance

Predictor	Multiple R	R Squared
Relationships	.52*	.27
Autonomy	.62*	.38

N=28

*p<.05

Table 6

Correlations between Task Characteristics, Structural Characteristics, Organizational Relationships, and Communication Processes

	Task Characteristics	Structural Characteristics	Communication Processes
Structure	-.64*	1.00	.03
Relationships	.05	.08	.74*
Communication	.00	-.03	1.00

N=28

$p < .05$